# **Poster Session III — Control Theory**

When: June 4, 2014 13:00–14:00

Where: Colosseum

Chair: Daniel Petersson

- 1. Distributed System Identification with ADMM Anders Hansson, Linköpings Universitet Michel Verhaegen, Delft University
- 2. Dual First-order Methods for Large-scale Convex Optimization Jie Lu, KTH Mikael Johansson, KTH
- 3. Network Clustering Algorithms for Traffic Planning Håkan Terelius, KTH Karl Henrik Johansson, KTH
- 4. Epidemic Information Discovery in Proximity-based Multichannel Wireless Networks

Antonio Gonga, KTH - Royal Institute of Technology Themistoklis Charalambous, KTH - Royal Institute of Technology Mikael Johansson, KTH - Royal Institute of Technology

5. Robust Synchronisation of Heterogeneous Networks via Integral Quadratic Constraints

Sei Zhen Khong, Lund University Enrico Lovisari, Lund University

- 6. On Stability and Resilience of Multicommodity Dynamical Flow Networks Gustav Nilsson, Department of Automatic Control, Lund University Giacomo Como, Department of Automatic Control, Lund University Enrico Lovisari, Department of Automatic Control, Lund University
- 7. Consensus Algorithms with Gyroscopic Feedback Sebastian van de Hoef, KTH, Royal Institute of Technology Dimos V. Dimarogonas, KTH, Royal Institute of Technology Panagiotis Tsiotras, Georgia Institute of Technology
- 8. Shaping the Crowd Motion by Moments Control Yuecheng Yang, Royal Institute of Technology Dimos Dimarogonas, Royal Institute of Technology Xiaoming Hu, Royal Institute of Technology
- 9. Crowd-sourcing Estimation with Strategic Senders Farhad Farokhi, KTH Royal Institute of Technology Andre Teixeira, KTH Royal Institute of Technology Cedric Langbort, University of Illinois at Urbana–Champaign (UIUC)

## 10. On-line Multi-objective Optimization of Dynamic Systems: Pareto Seeking Control

Khalid Atta, Luleå tekniska universitet-LTU Andreas Johansson, Luleå tekniska universitet-LTU Thomas Gustafsson, Luleå tekniska universitet-LTU 11. **Parallel Riccati Factorizations with Applications to Model Predictive Control** Isak Nielsen, Linköpings Universitet Daniel Axehill, Linköpings Universitet

#### 12. Look-ahead Control for Fuel-efficient Heavy-duty Vehicle Platooning

Valerio Turri, ACCESS Linnaeus Centre and Department of Automatic Control, KTH Royal Institute of Technology Bart Besselink, ACCESS Linnaeus Centre and Department of Automatic Control, KTH Royal

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Jonas Mårtensson, ACCESS Linnaeus Centre and Department of Automatic Control, KTH Royal Institute of Technology

Karl H. Johansson, ACCESS Linnaeus Centre and Department of Automatic Control, KTH Royal Institute of Technology

- 13. Balanced Truncation Preserving Ellipsoidal Cone Invariance Christian Grussler, Department of Automatic Control, Lund University Anders Rantzer, Department of Automatic Control, Lund University
- 14. **Model Reduction of Networked Passive Systems by Clustering** Bart Besselink, KTH Royal Institute of Technology Henrik Sandberg, KTH Royal Institute of Technology Karl Henrik Johansson, KTH Royal Institute of Technology
- 15. **Optimization-based Modeling of LPV Systems using a Frequency-limited H**<sub>2</sub>**-objective** Daniel Petersson, Linköpings Universitet Johan Löfberg, Linköpings Universitet

#### 16. Analysis of Extremum Seeking Control using Bifurcation Theory Olle Trollberg, KTH Royal Institute of Technology Elling Jacobsen, KTH Royal Institute of Technology

## 17. Sensor Placement for Fault Detection and Isolation in Noisy Systems Daniel Eriksson, Department of Electrical Engineering, Linköping University, Sweden Yi Dong, Institute for Software Integrated Systems, Vanderbilt University, USA Erik Frisk, Department of Electrical Engineering, Linköping University, Sweden Mattias Krysander, Department of Electrical Engineering, Linköping University, Sweden Gautam Biswas, Institute for Software Integrated Systems, Vanderbilt University, USA

### 18. Hybrid State Observer for Time-delay Systems under Intrinsic Impulsive Feedback

Diana Yamalova, Uppsala University Alexander Churilov, St. Petersburg State University Alexander Medvedev, Uppsala University

19. Discretizing Stochastic Dynamical Systems using Lyapunov Equations Niklas Wahlström, Linköping university Patrik Axelsson, Linköping university Fredrik Gustafsson, Linköping university

## 20. Friction Identification in Different Mechanical Systems

Szabolcs Fodor, Department of Applied Physics and Electronics, Umeå University Leonid Freidovich, Department of Applied Physics and Electronics, Umeå University

# 21. Spurious Convergence of Iterative Learning Control

*M. Mahdi Ghazaei Ardakani, Department of Automatic Control, Lund University Bo Bernhardsson, Department of Automatic Control, Lund University* 

- 22. **Towards a New Generation of Relay Autotuners** Josefin Berner, Lund University Karl Johan Åström, Lund University Tore Hägglund, Lund University
- 23. Control of an Industrial Hydraulic System: Partial Stability Approach Carlos Vázquez, Department of Applied Physics and Electronics, Umeå University Stanislav Aranovskiy, Department of Control Systems and Informatics, ITMO University Leonid Freidovich, Department of Applied Physics and Electronics, Umeå University
- 24. **Time-varying Gain Differentiator: High-gain and Second Order Sliding Mode** Carlos Vázquez, Department of Applied Physics and Electronics, Umeå University Stanislav Aranovskiy, Department of Control Systems and Informatics, ITMO University Leonid Freidovich, Department of Applied Physics and Electronics, Umeå University
- 25. Control of Robotic Additive Manufacturing using a Resistance Process Model Petter Hagqvist, University West Almir Heralić, GKN Aerospace Sweden AB Anna-Karin Christiansson, University West